

FIG. 1

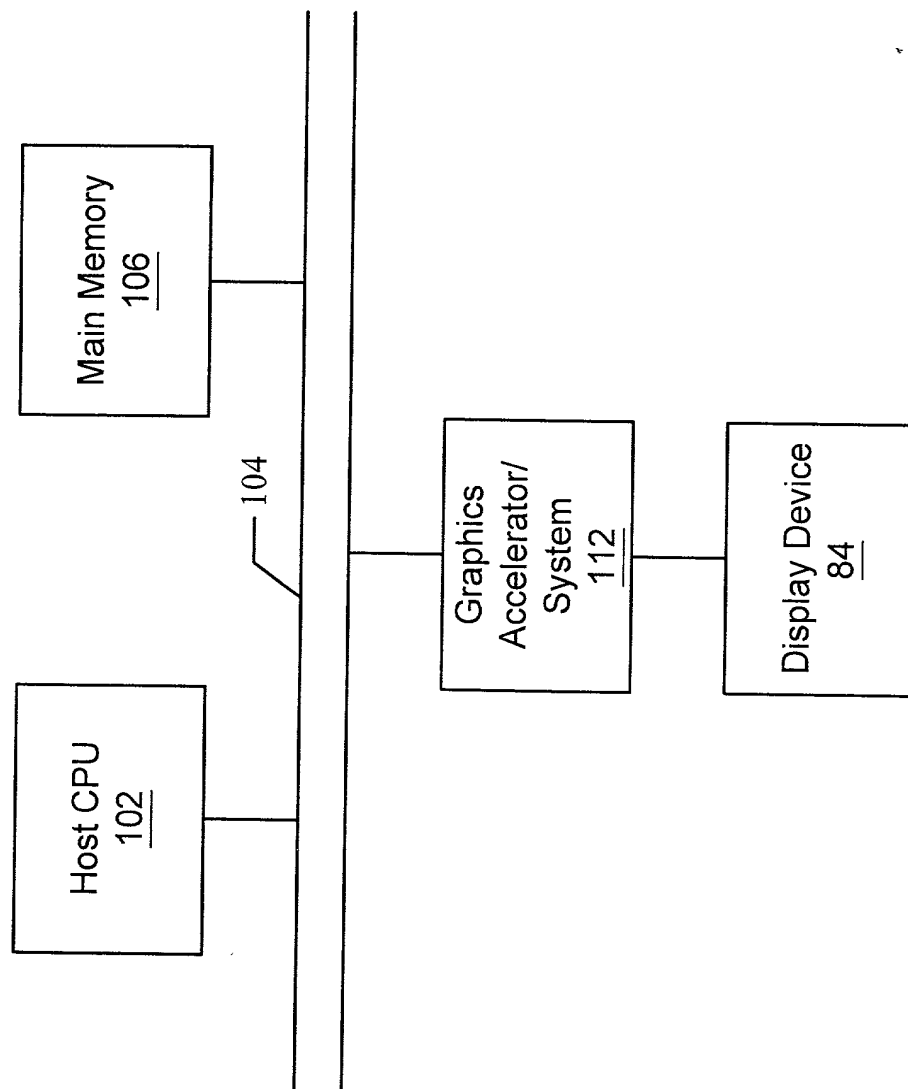


FIG. 2

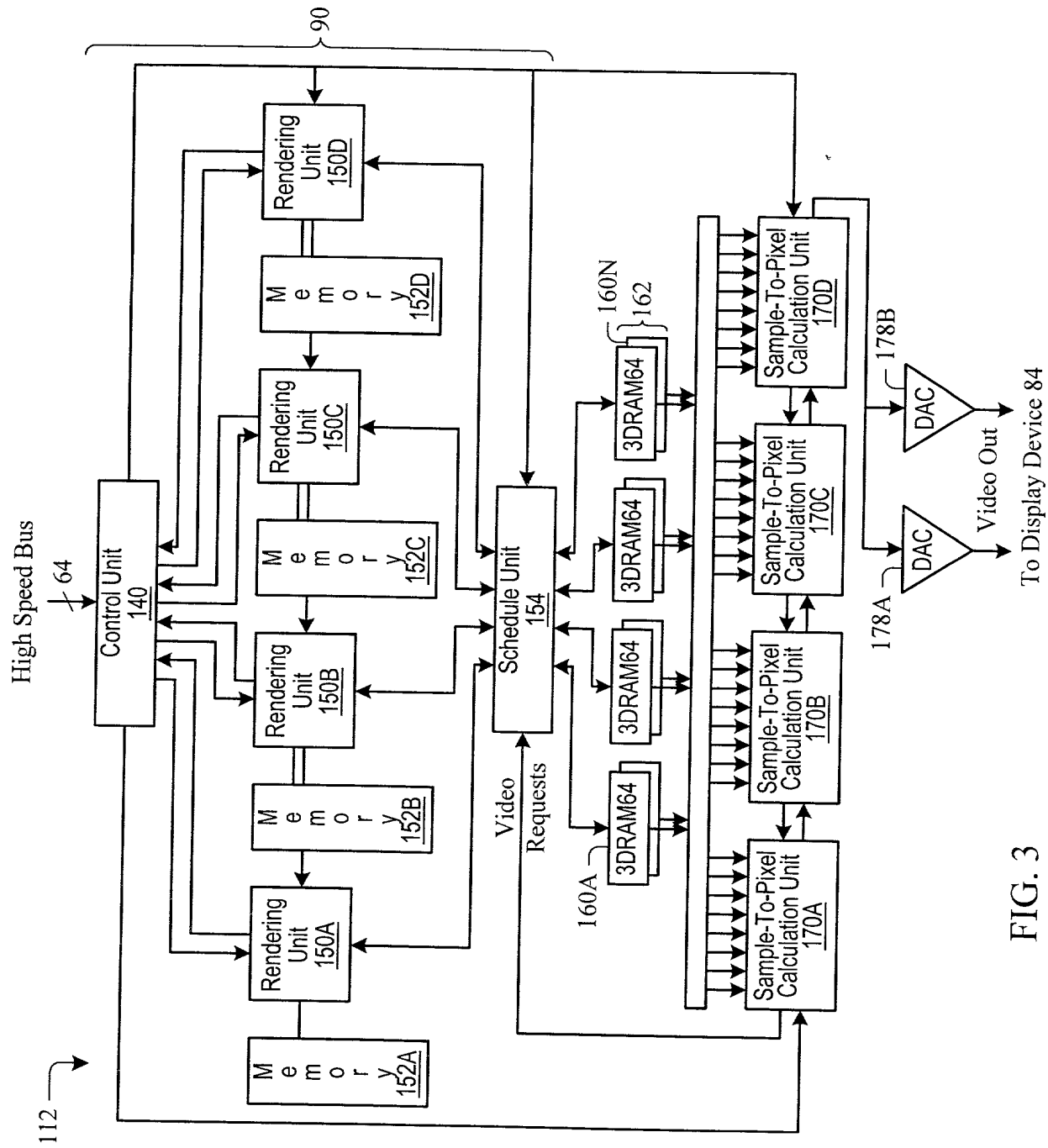


FIG. 3

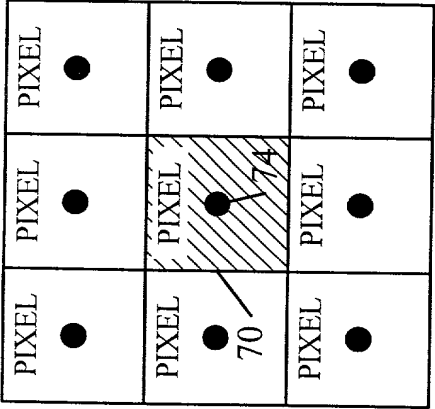


FIG. 4

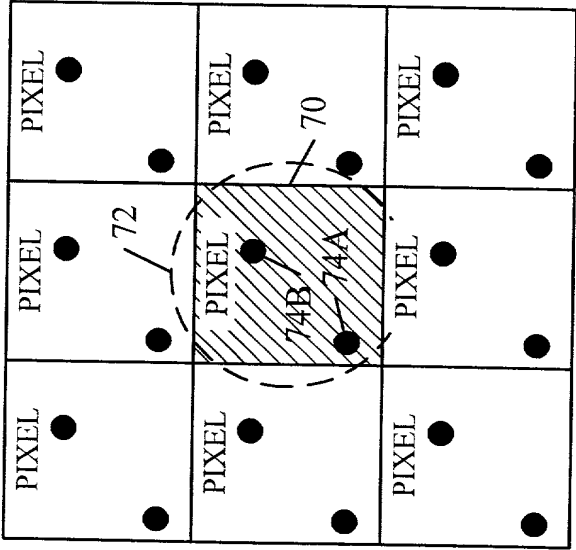


FIG. 5A

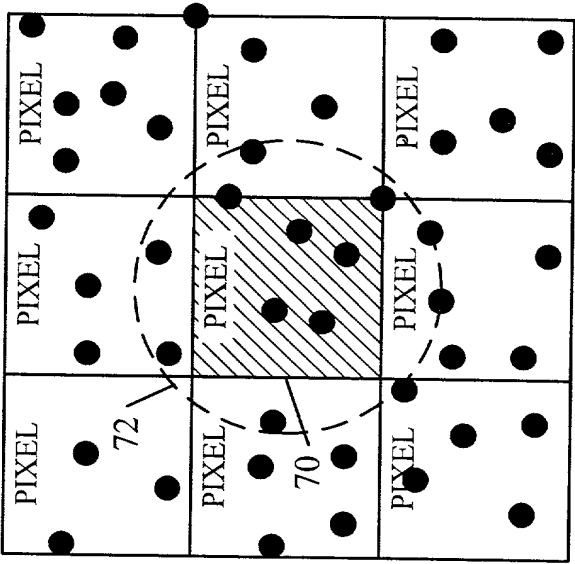


FIG. 5B

FIG. 6 is a block diagram of a system for rendering a scene. The system includes a geometry data source 350, a draw/render process 352, a sample position memory 354, a super-sampled sample buffer 162, a sample-to-pixel calculation process 360, and a display device 84. The geometry data source 350 provides vertex data to the draw/render process 352. The draw/render process 352 outputs sample coordinates to the sample position memory 354. The sample position memory 354 outputs sample coordinates to the super-sampled sample buffer 162. The super-sampled sample buffer 162 outputs bins to the sample-to-pixel calculation process 360. The sample-to-pixel calculation process 360 outputs a display pixel to the display device 84.

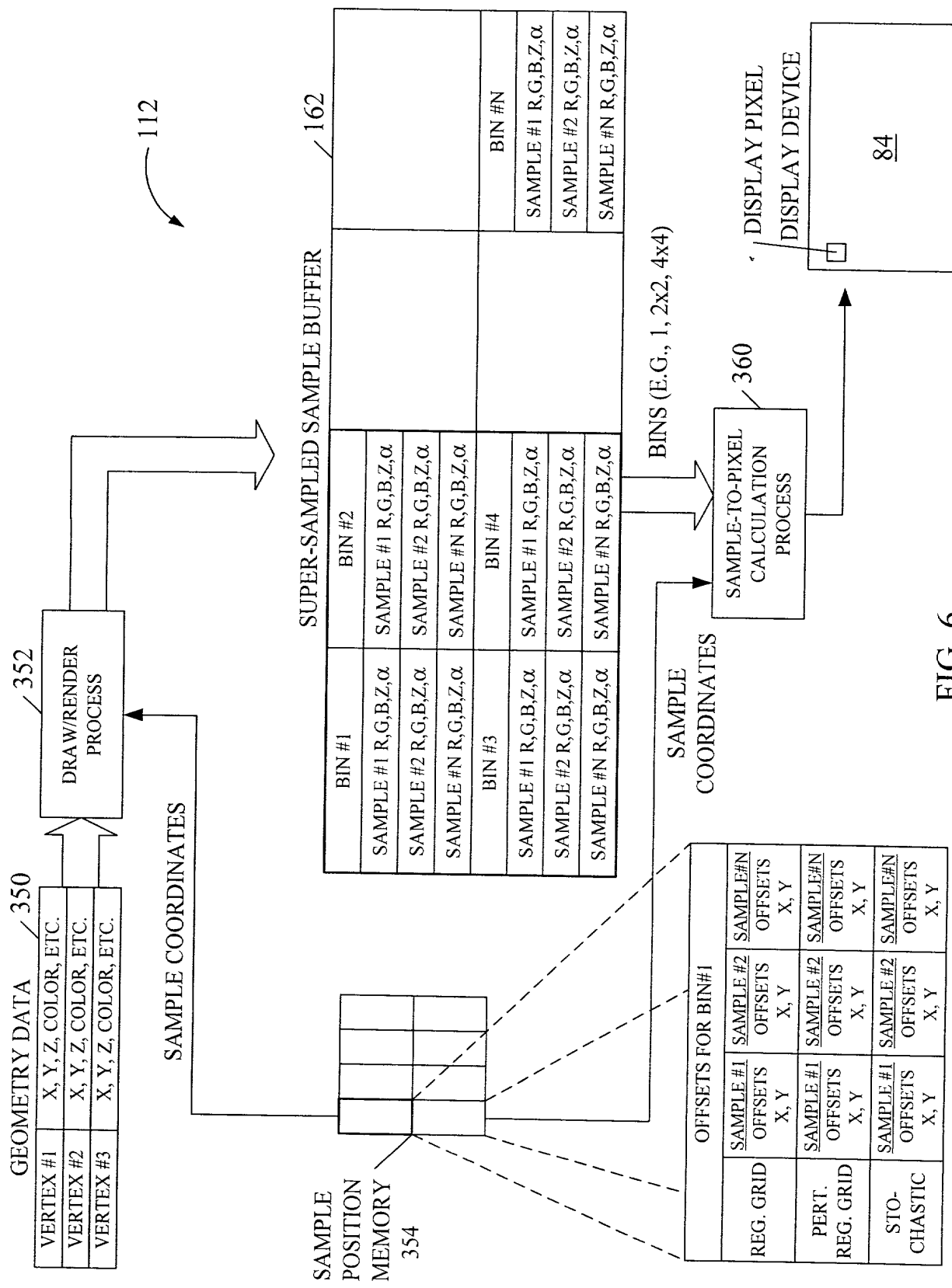


FIG. 6

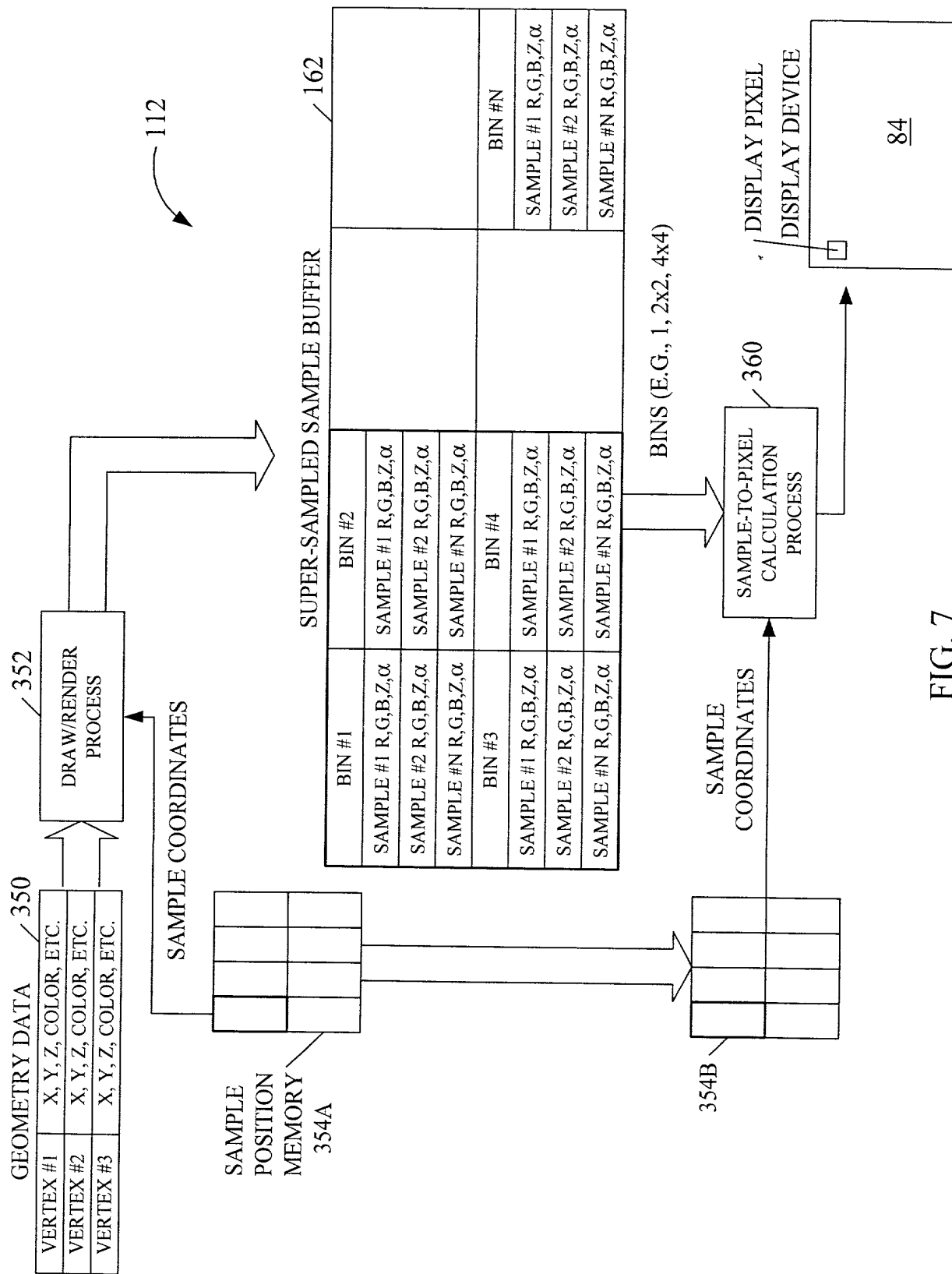
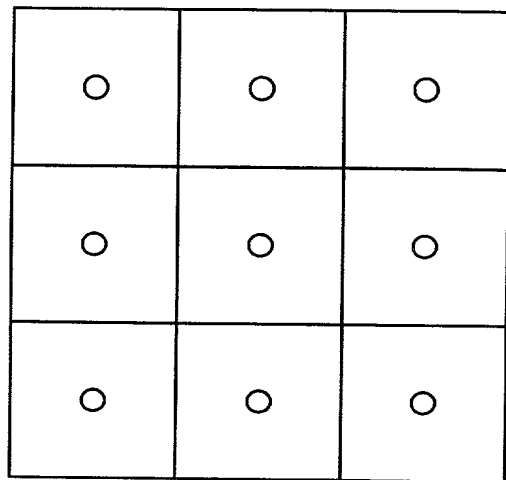
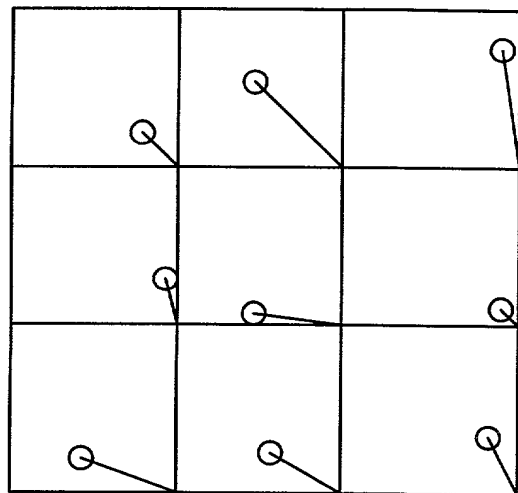


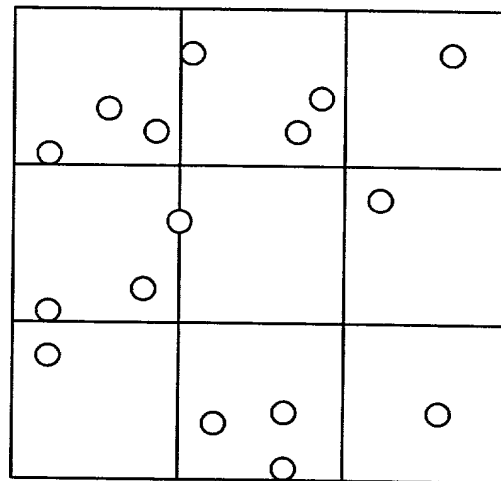
FIG. 7



REGULAR GRID 190



PERTURBED
REGULAR GRID 192



194 STOCHASTIC
SPACING

FIG. 8

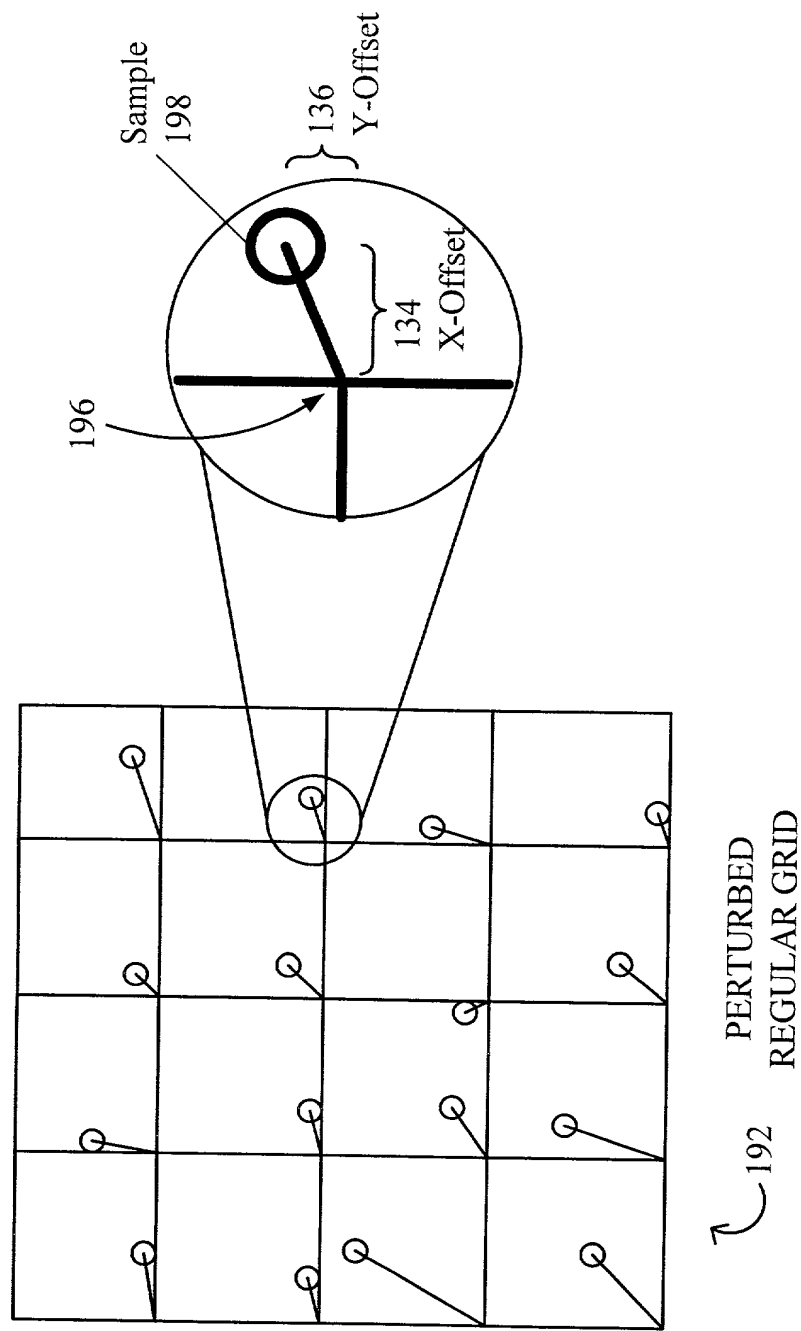


FIG. 9

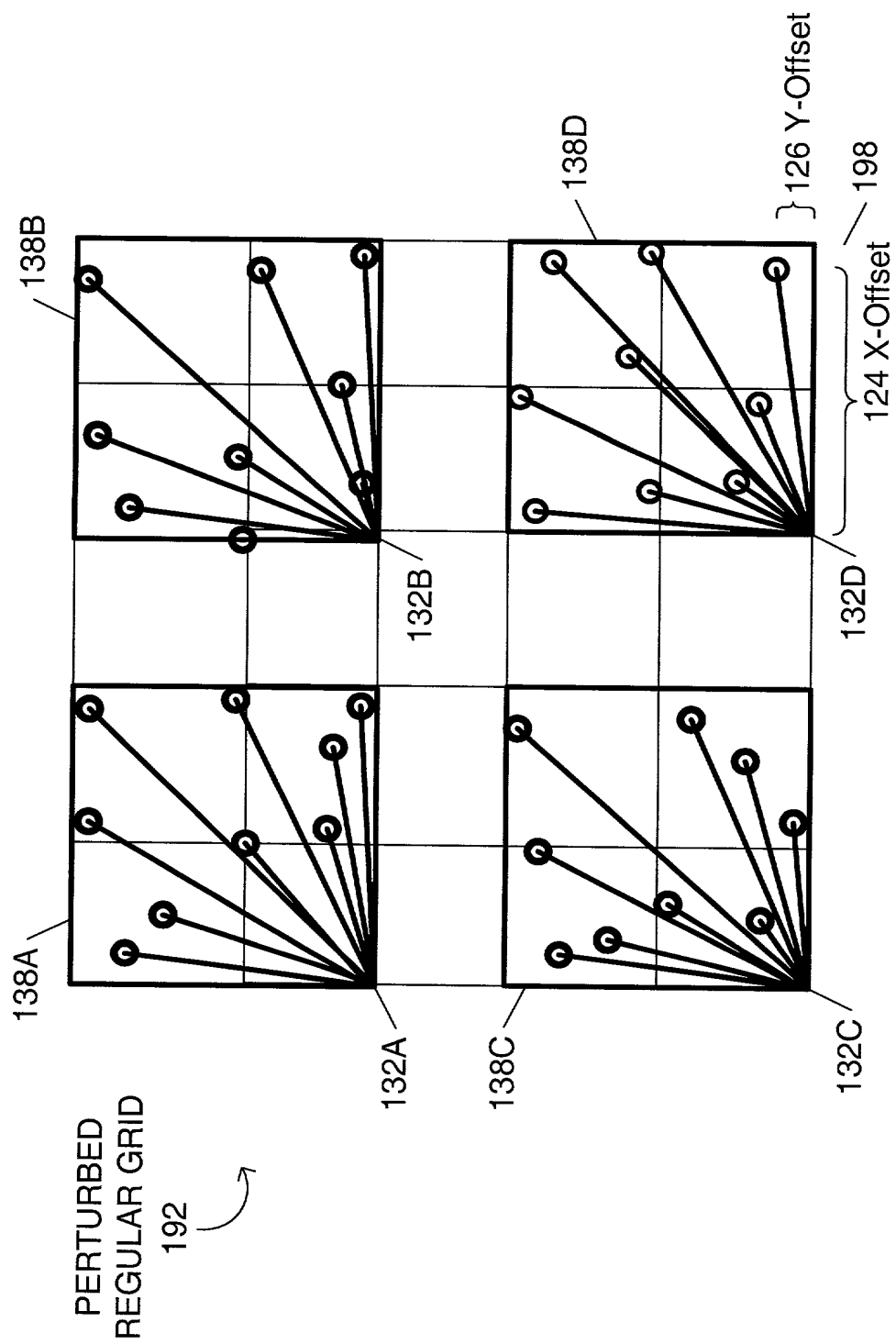


FIG. 10

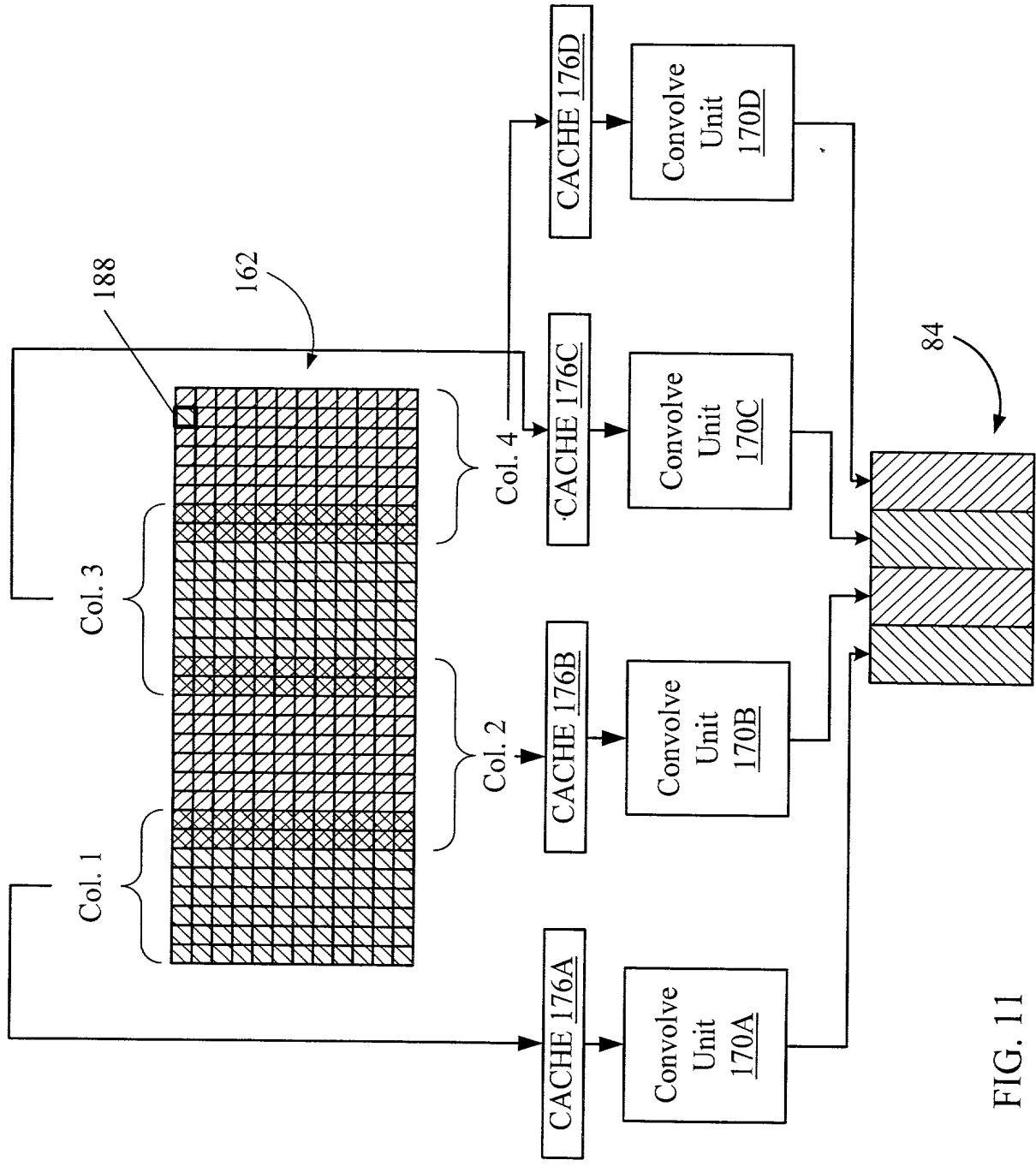


FIG. 11

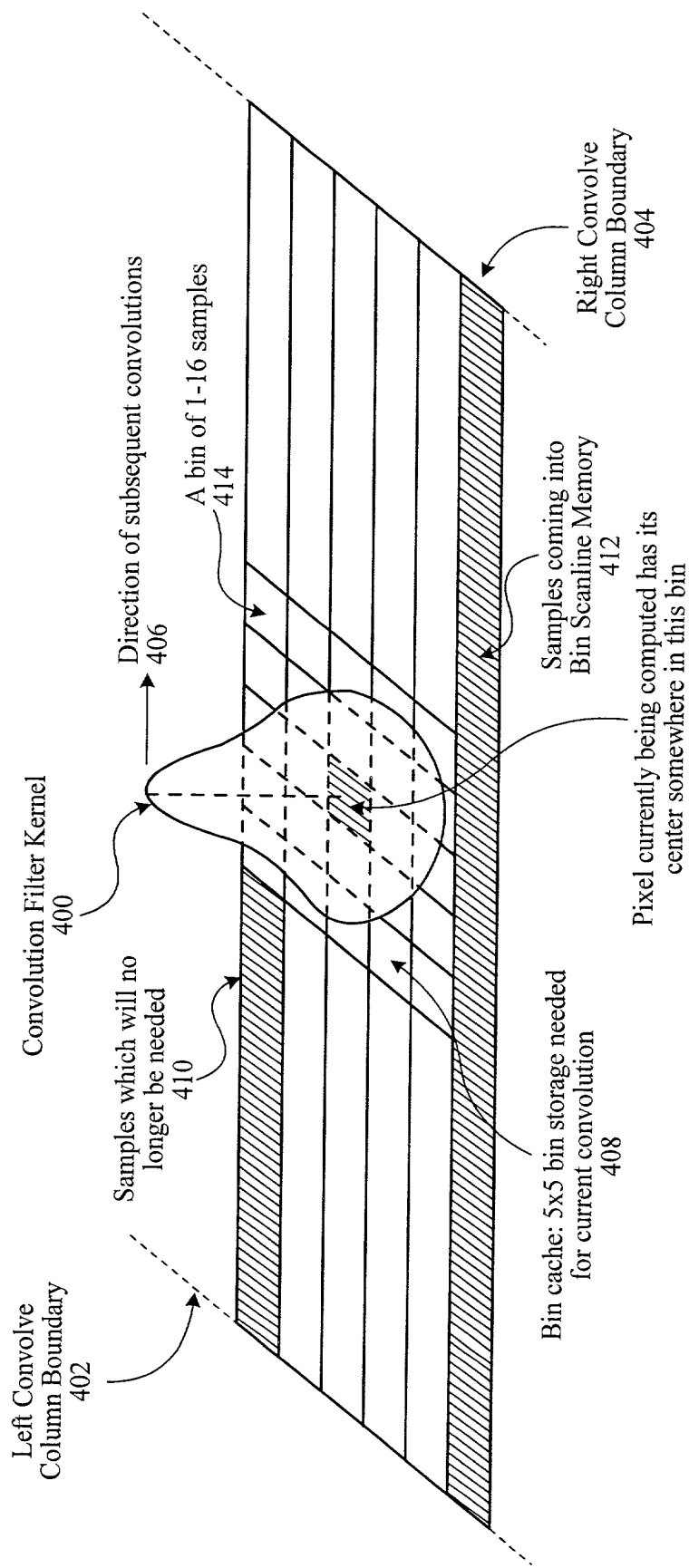


FIG. 11A

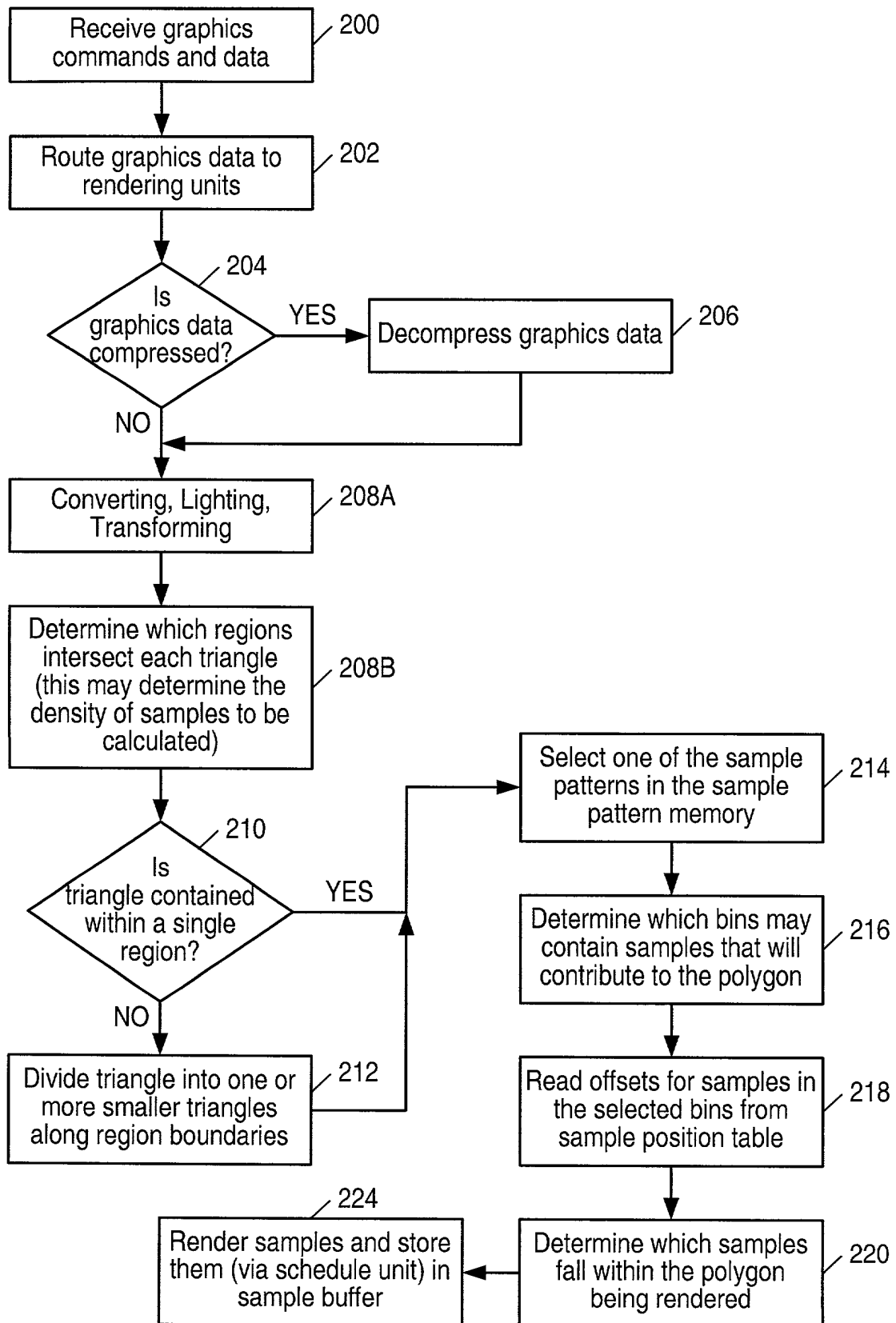


FIG. 12

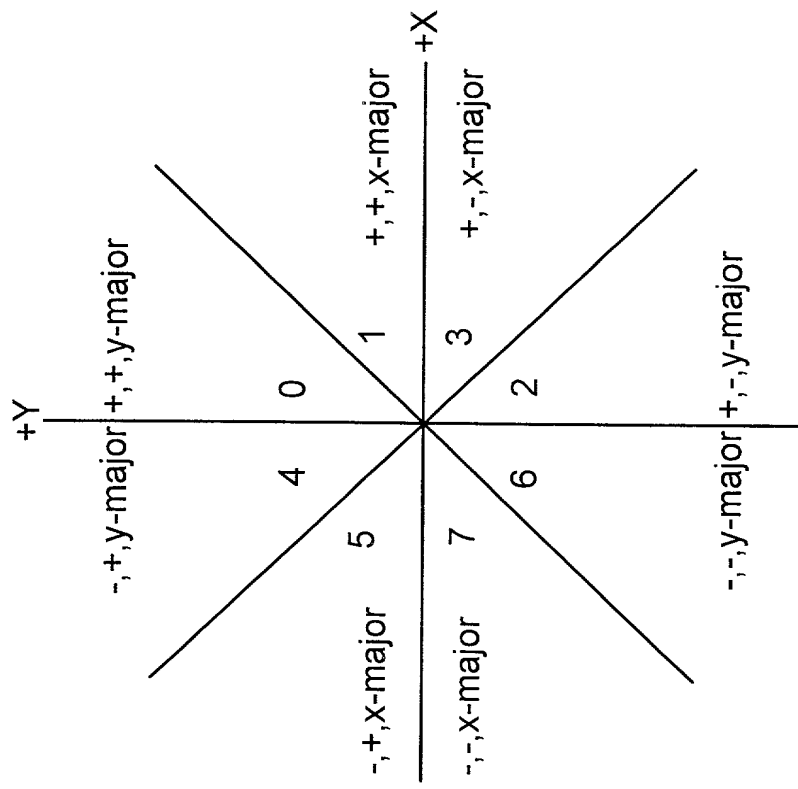


FIG. 12A

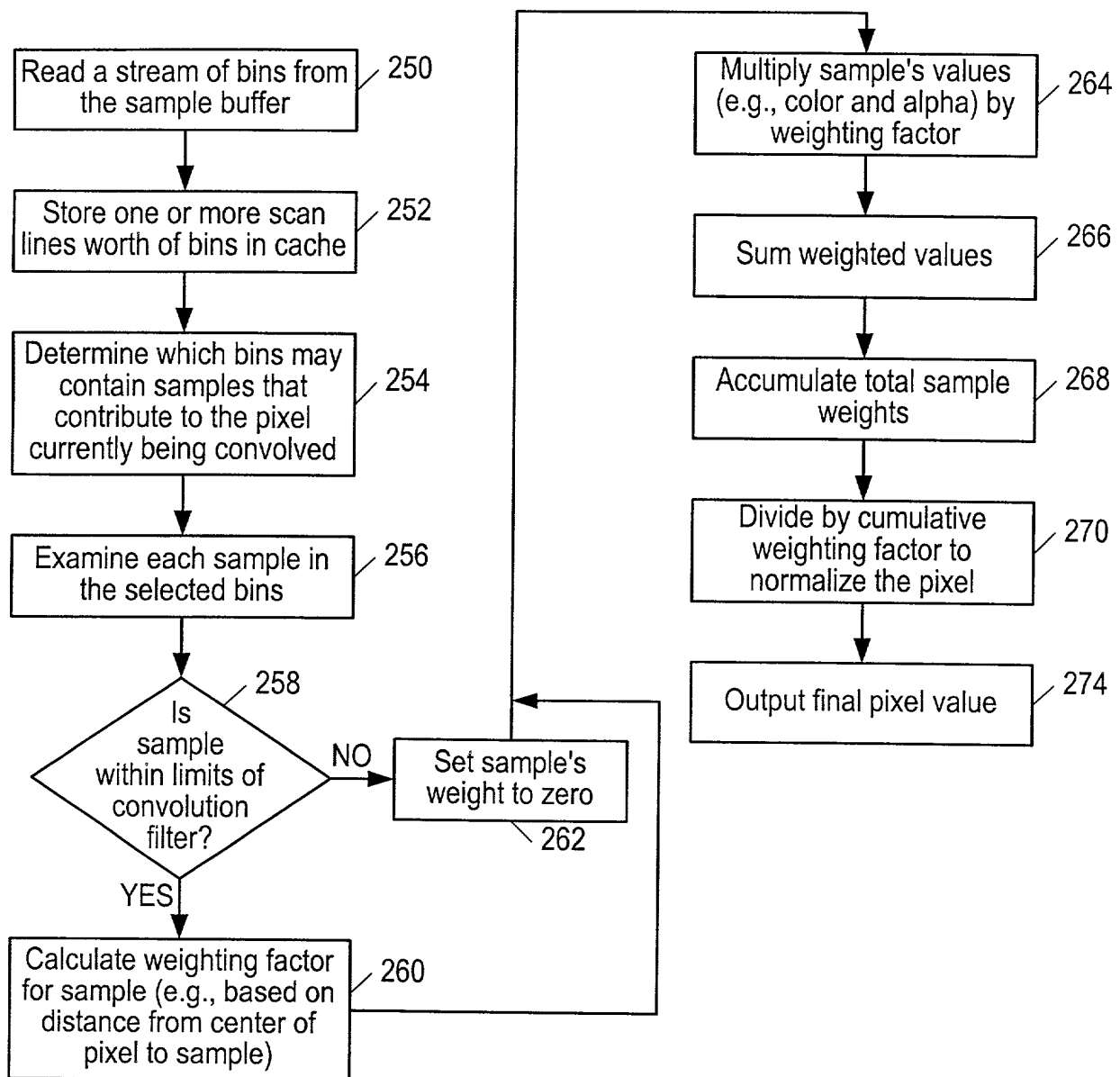


FIG. 13

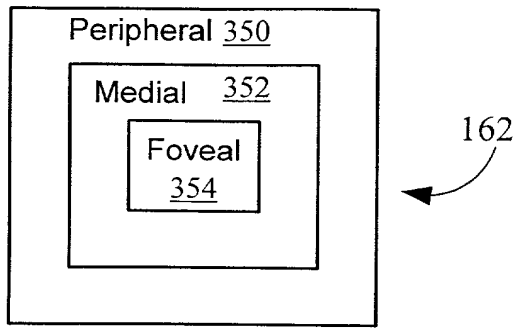


FIG. 15

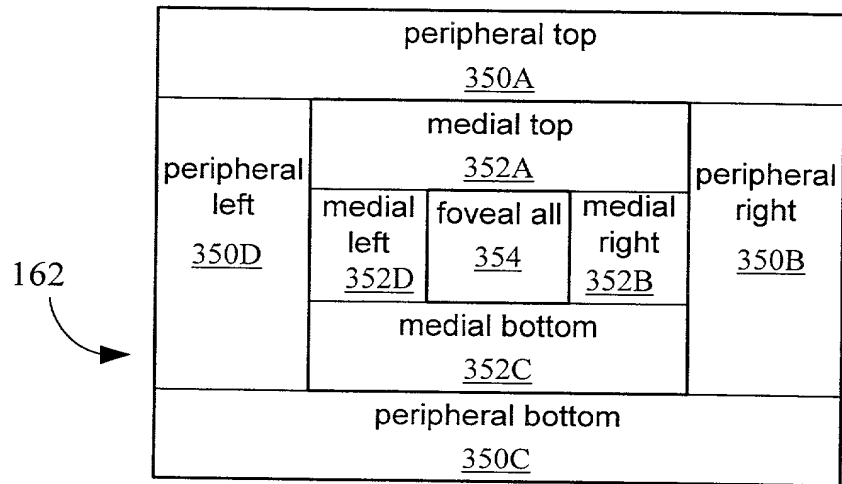


FIG. 16

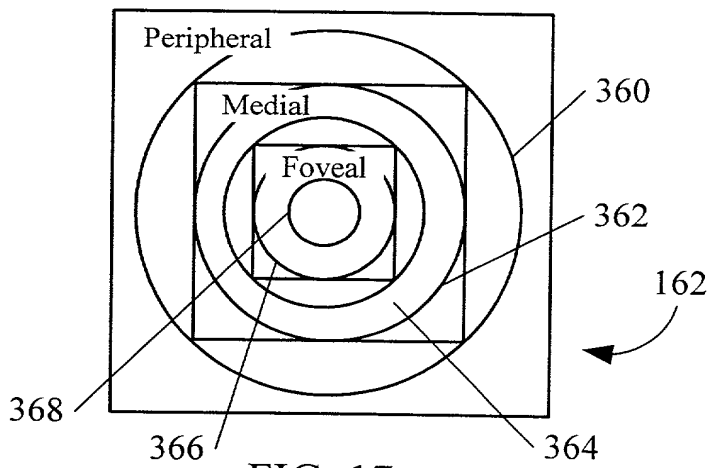
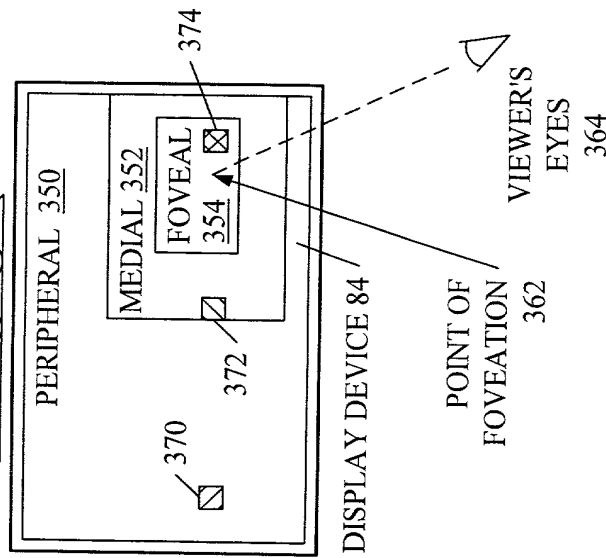


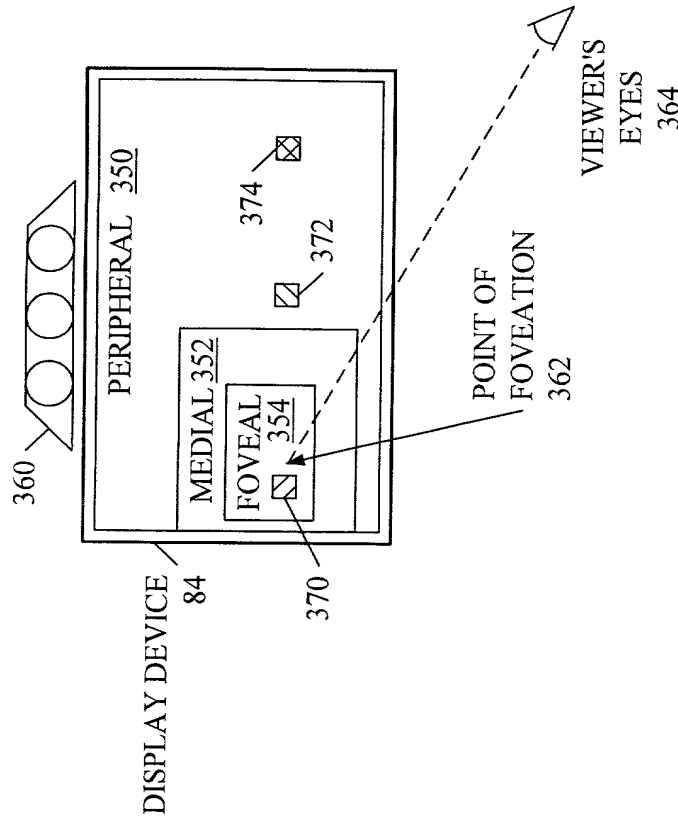
FIG. 17

EYE OR HEAD TRACKING DEVICE 360



- ☒ FOVEAL REGION = 8 SAMPLES PER BIN
CONVOLUTION RADIUS TOUCHES 4 BINS
TOTAL = 32 SAMPLES MAY CONTRIBUTE
- ☐ MEDIAL REGION = 4 SAMPLES PER BIN
CONVOLUTION RADIUS TOUCHES 4 BINS
TOTAL = 16 SAMPLES MAY CONTRIBUTE
- ☐ PERIPHERAL REGION = 1 SAMPLE PER BIN
CONVOLUTION RADIUS TOUCHES 1 BIN
TOTAL = 1 SAMPLE MAY CONTRIBUTE

FIG. 18A



- ☒ PERIPHERAL REGION = 1 SAMPLE PER BIN
CONVOLUTION RADIUS TOUCHES 1 BIN
TOTAL = 1 SAMPLE MAY CONTRIBUTE
- ☐ PERIPHERAL REGION = 1 SAMPLE PER BIN
CONVOLUTION RADIUS TOUCHES 1 BINS
TOTAL = 1 SAMPLE MAY CONTRIBUTE
- ☐ FOVEAL REGION = 8 SAMPLES PER BIN
CONVOLUTION RADIUS TOUCHES 4 BIN
TOTAL = 32 SAMPLE MAY CONTRIBUTE

FIG. 18B

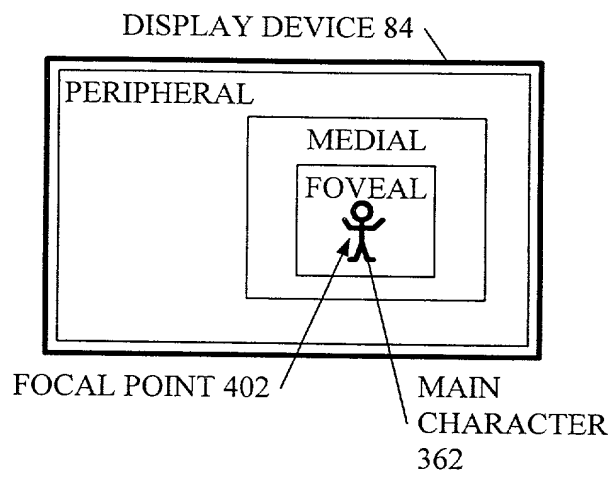


FIG. 19A

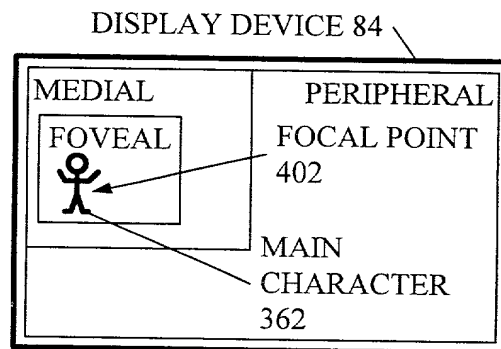


FIG. 19B

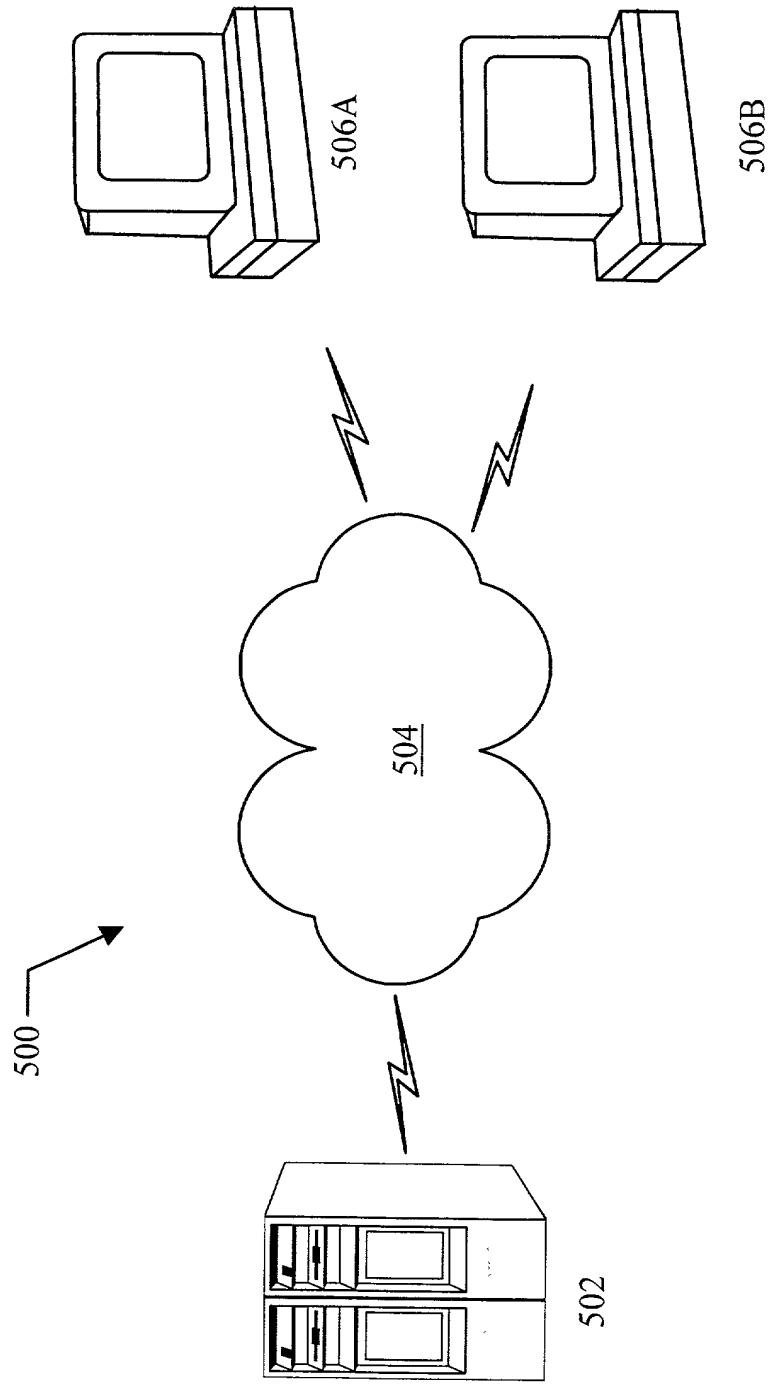


FIG. 20

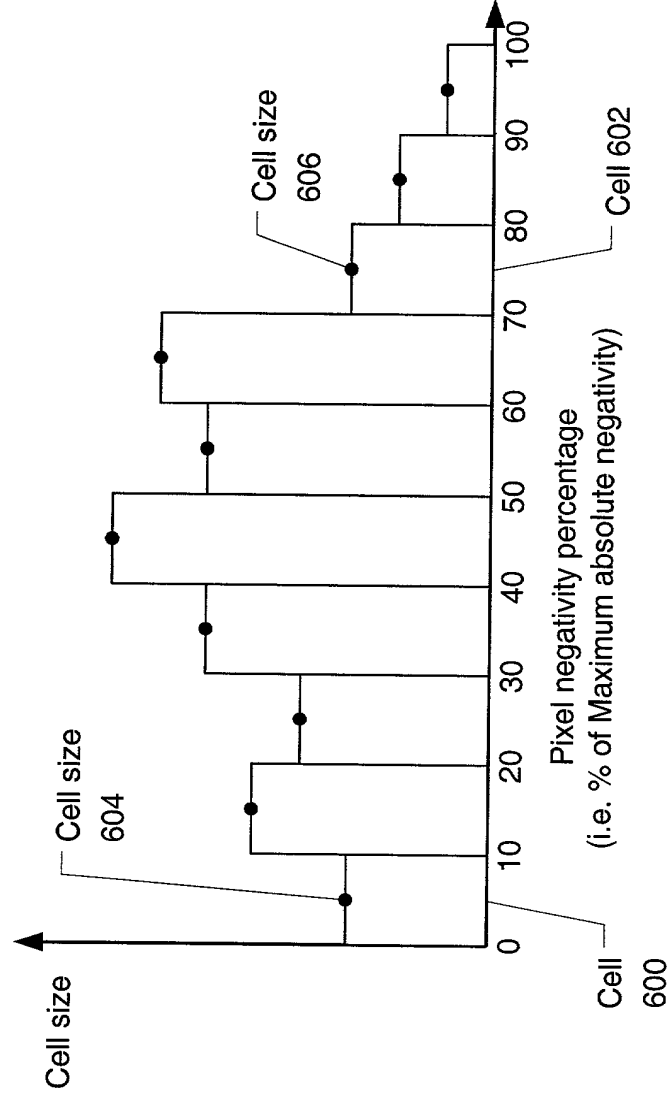
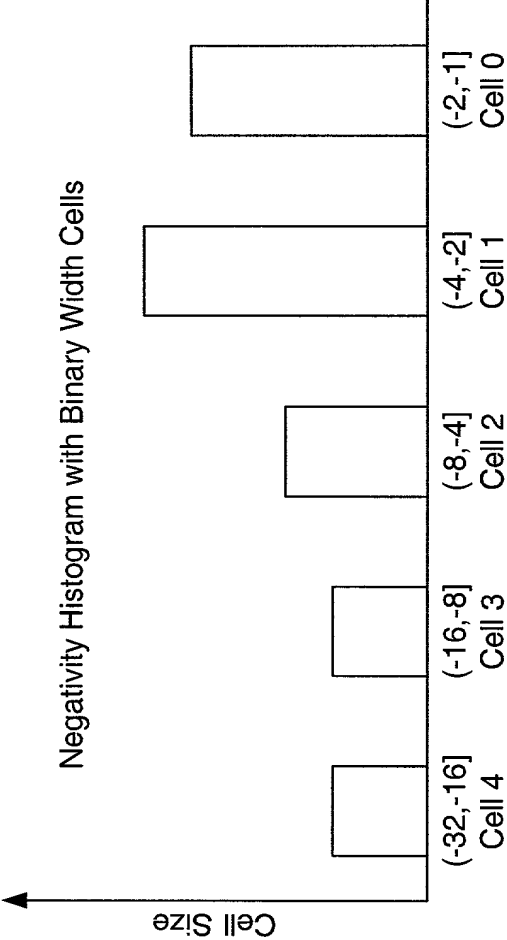


Figure 21



Each Cell defined by a ranges of pixel negativity values of the form (A,B]

Fig. 22

Fig. 23A Truncated Sinc Filter

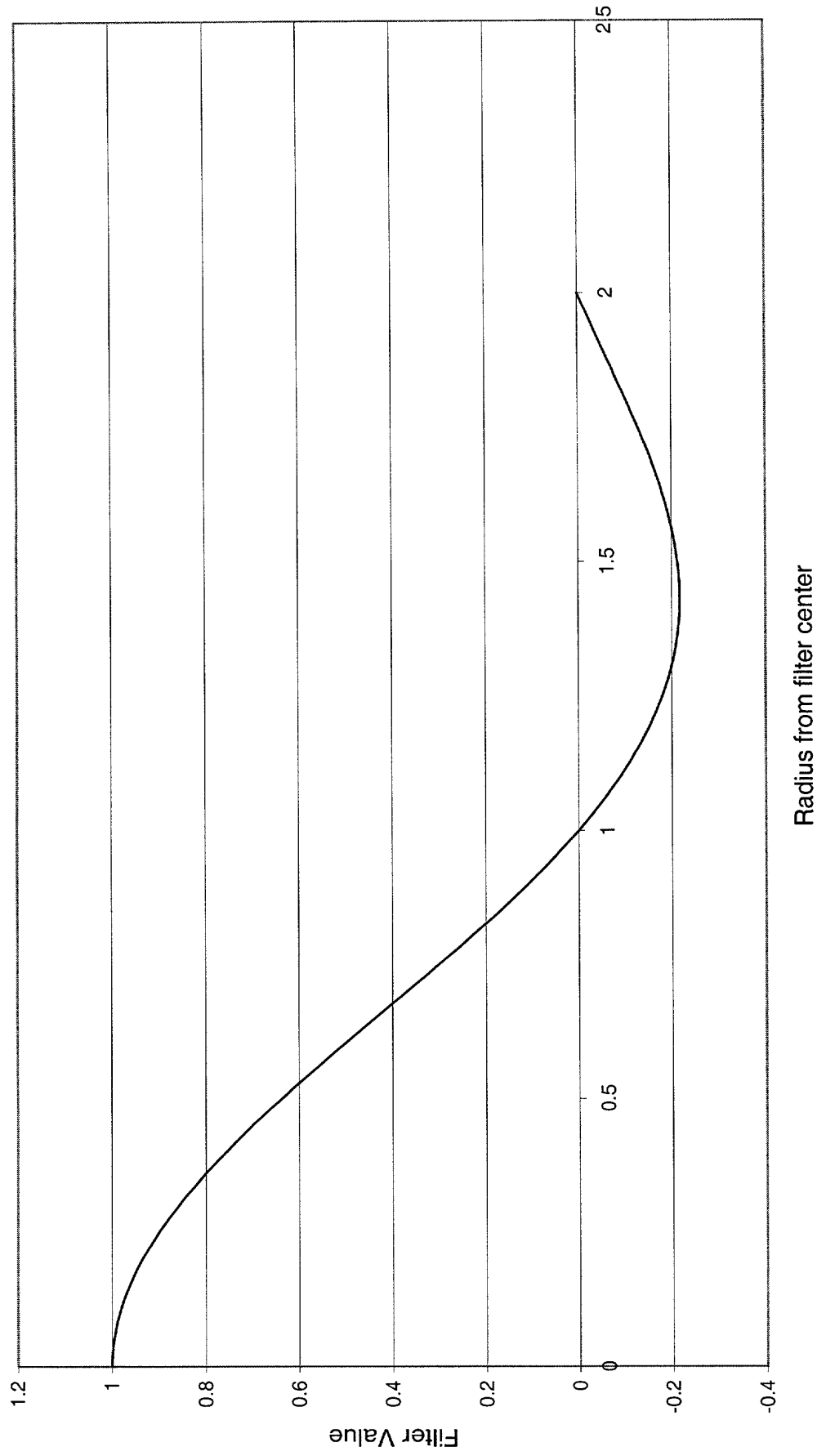
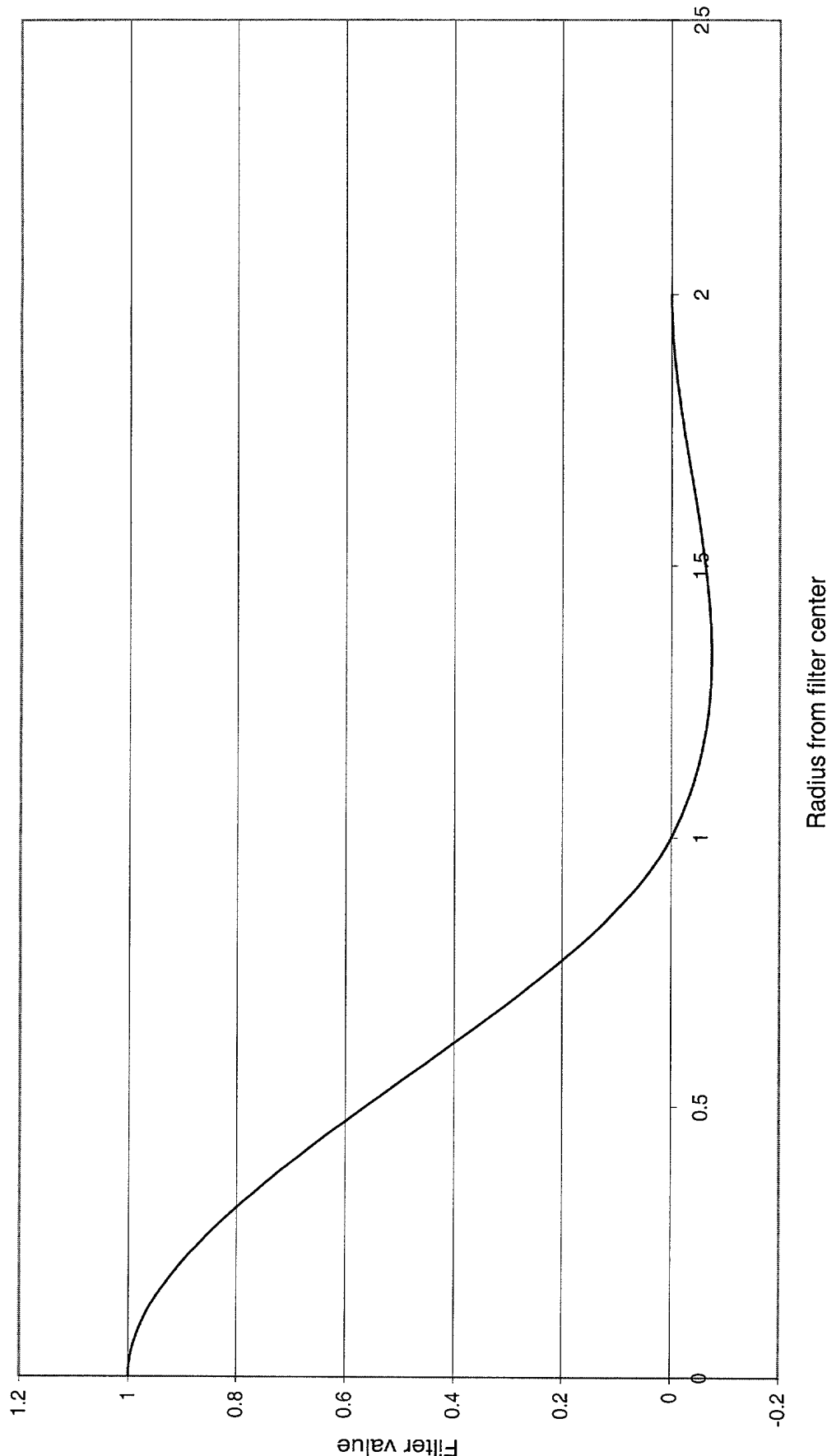


Fig. 23B Catmull-Rom Filter



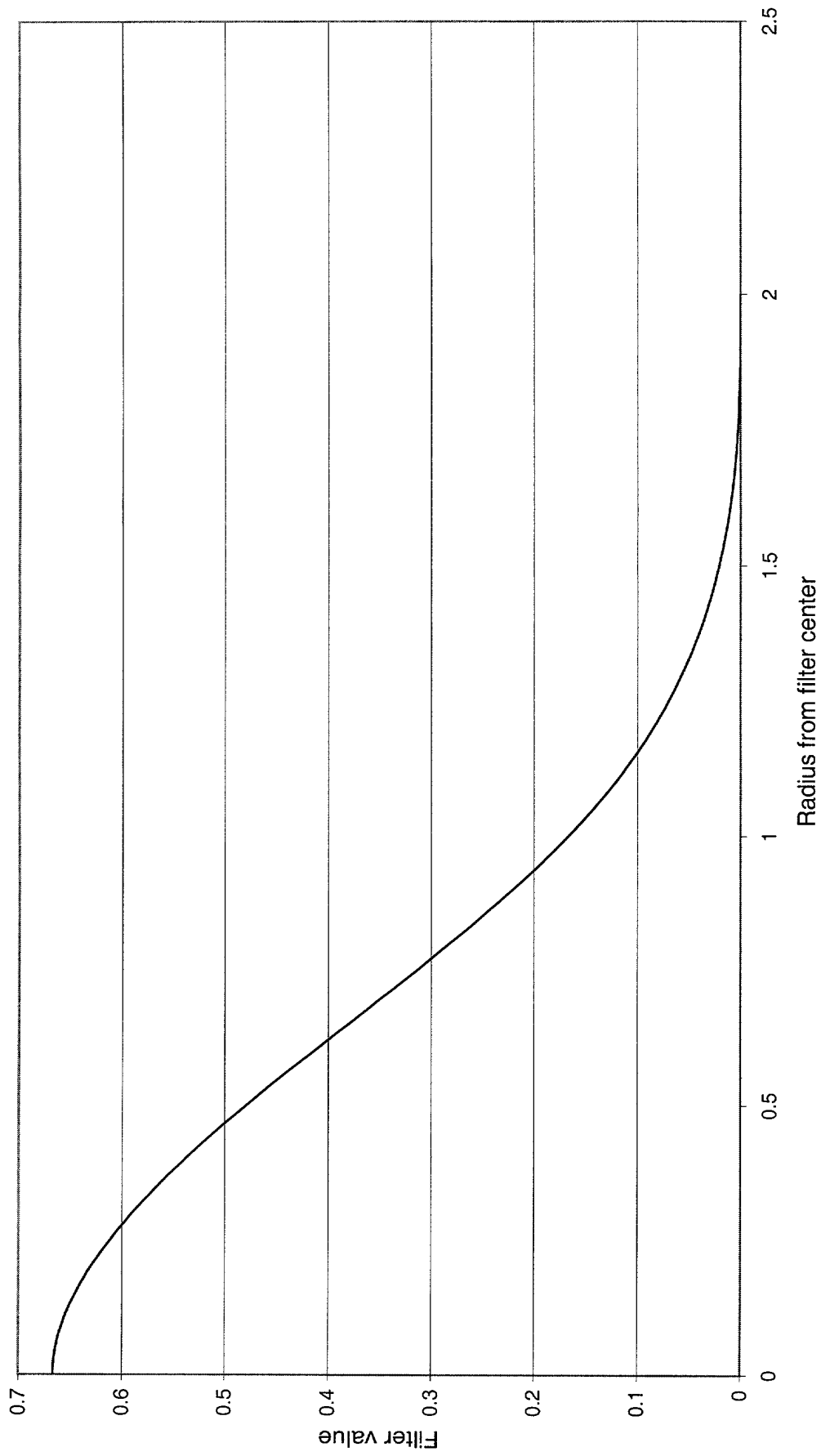


Fig. 23C Cubic B-Spline

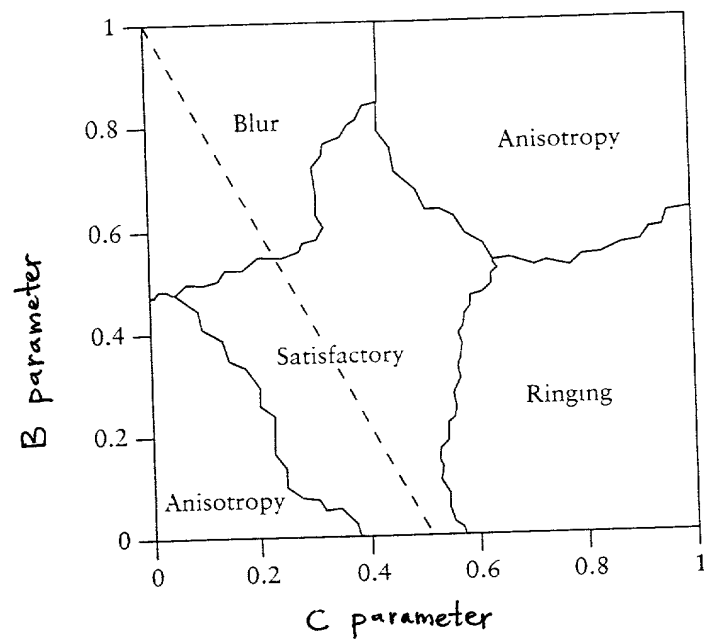
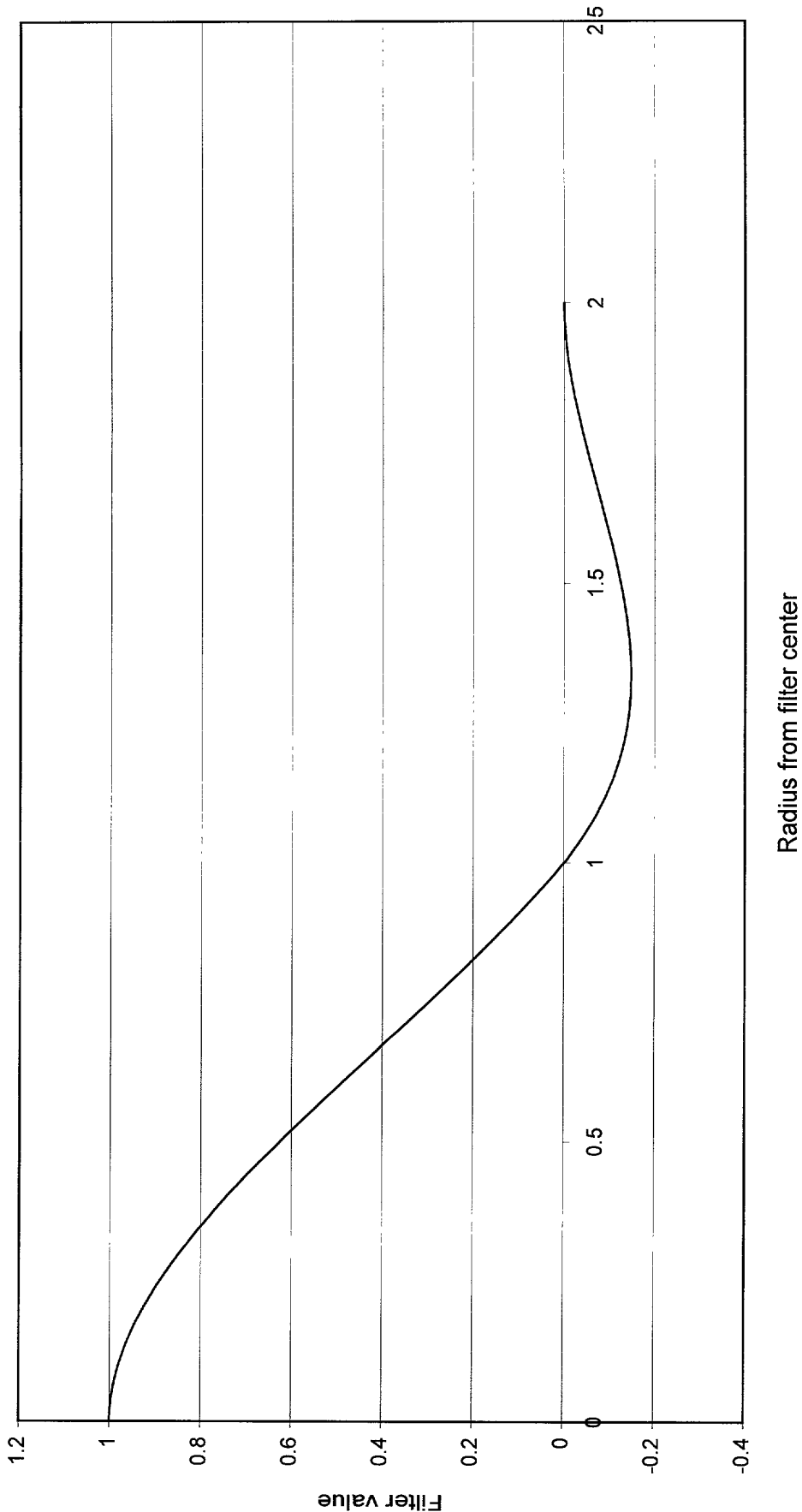


Fig. 23D

Fig. 23E Cardinal cubic spline,
i.e. Mitchell-Netravali filter (0, 1)



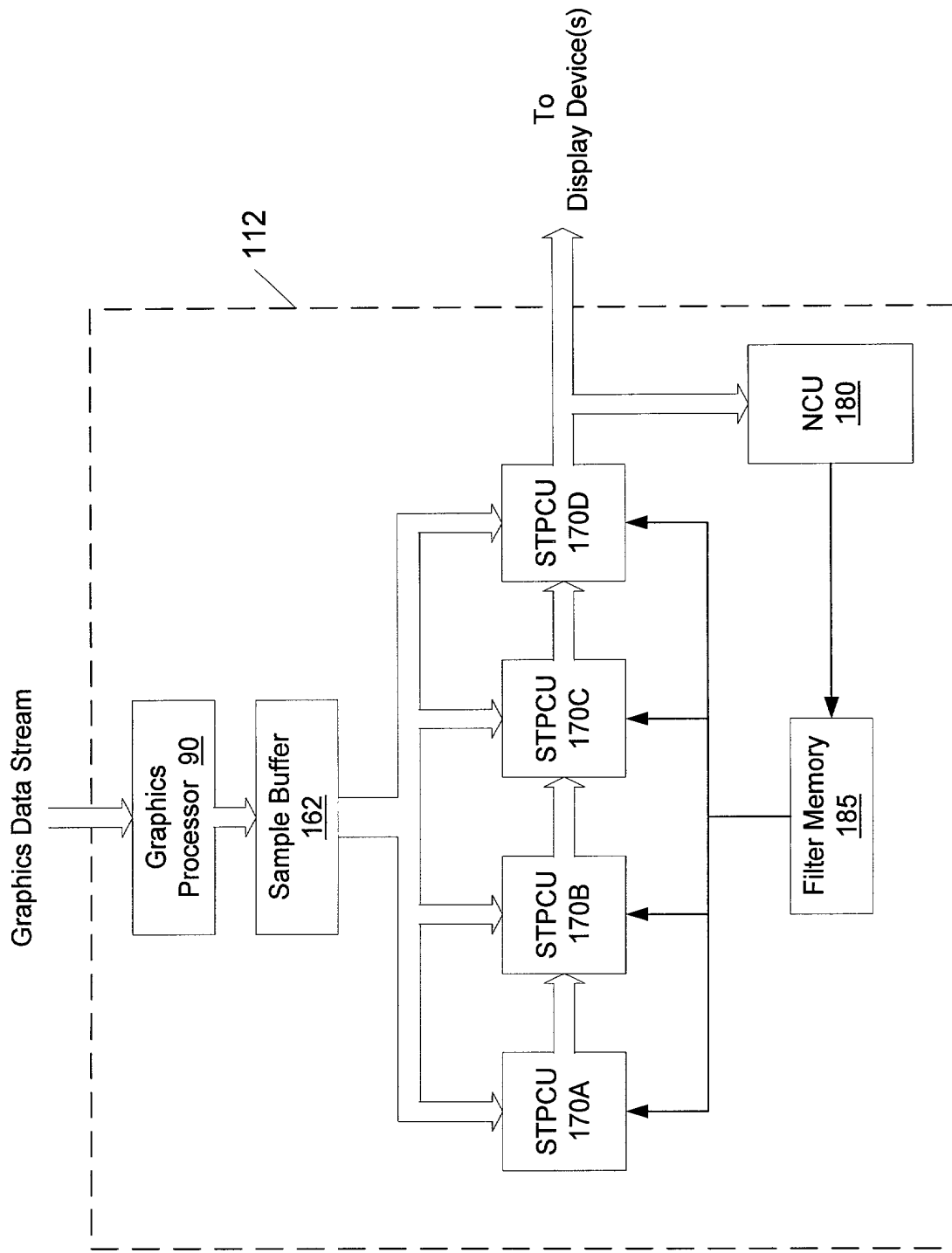


Fig. 25

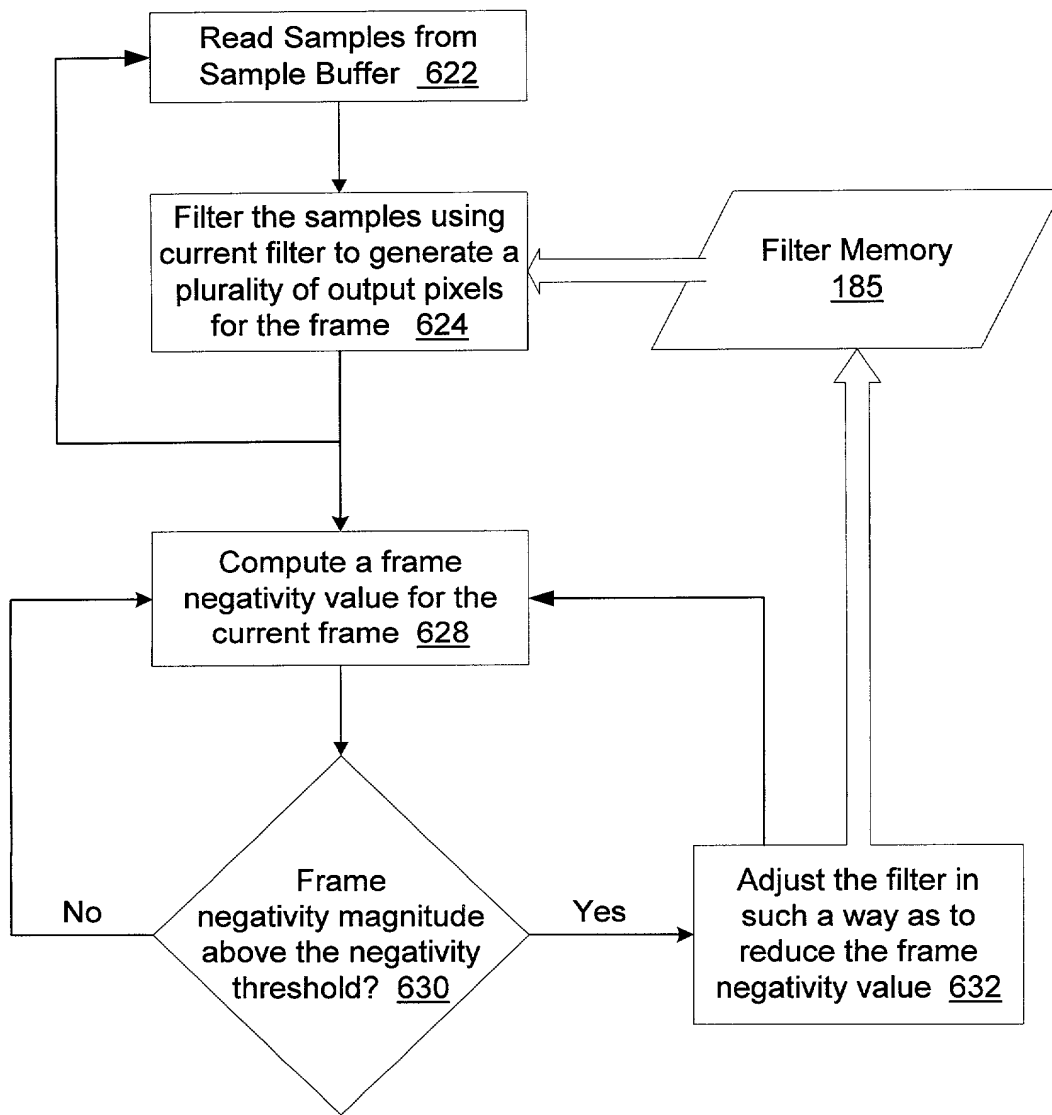


Fig. 26

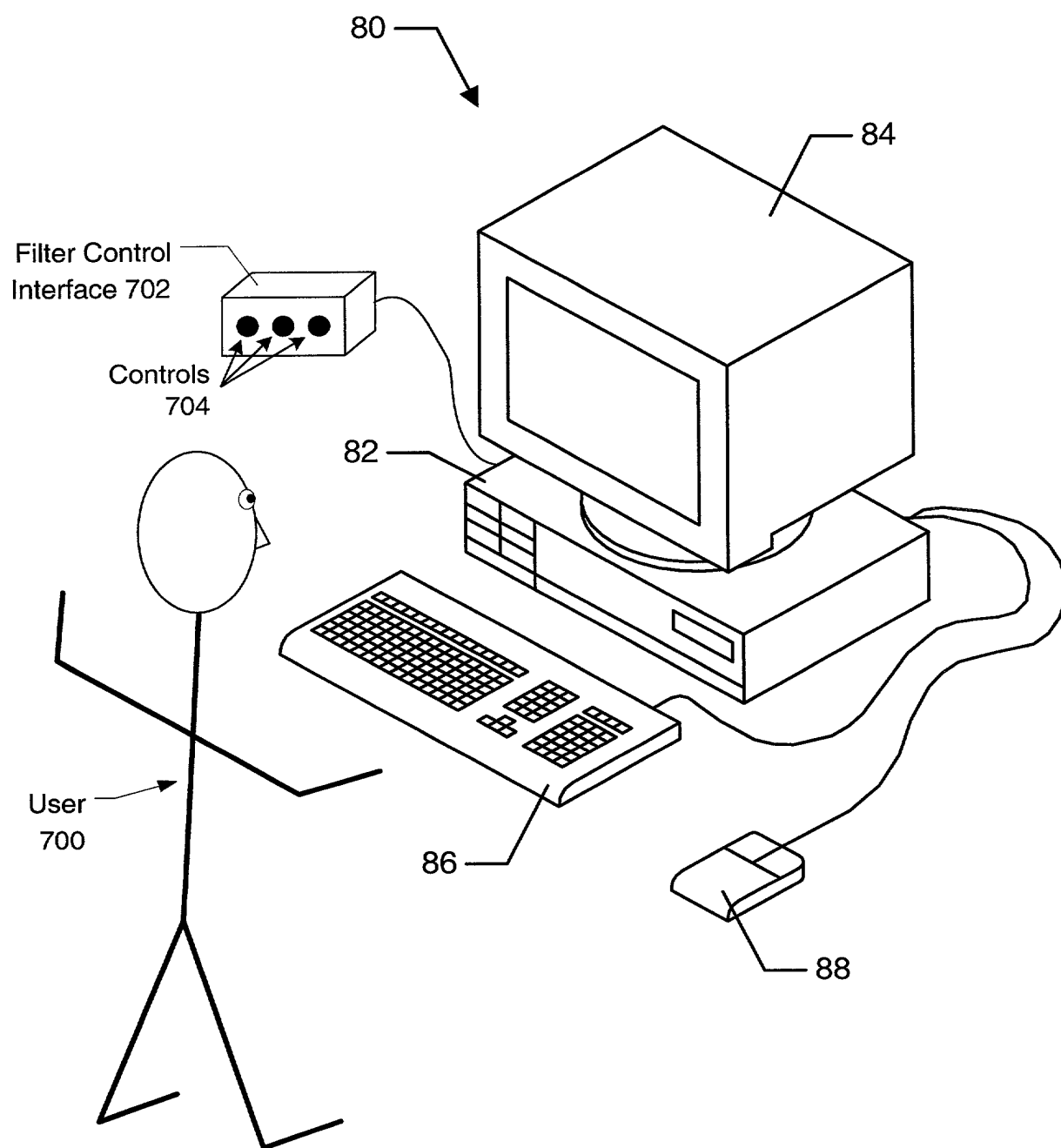


Fig. 27

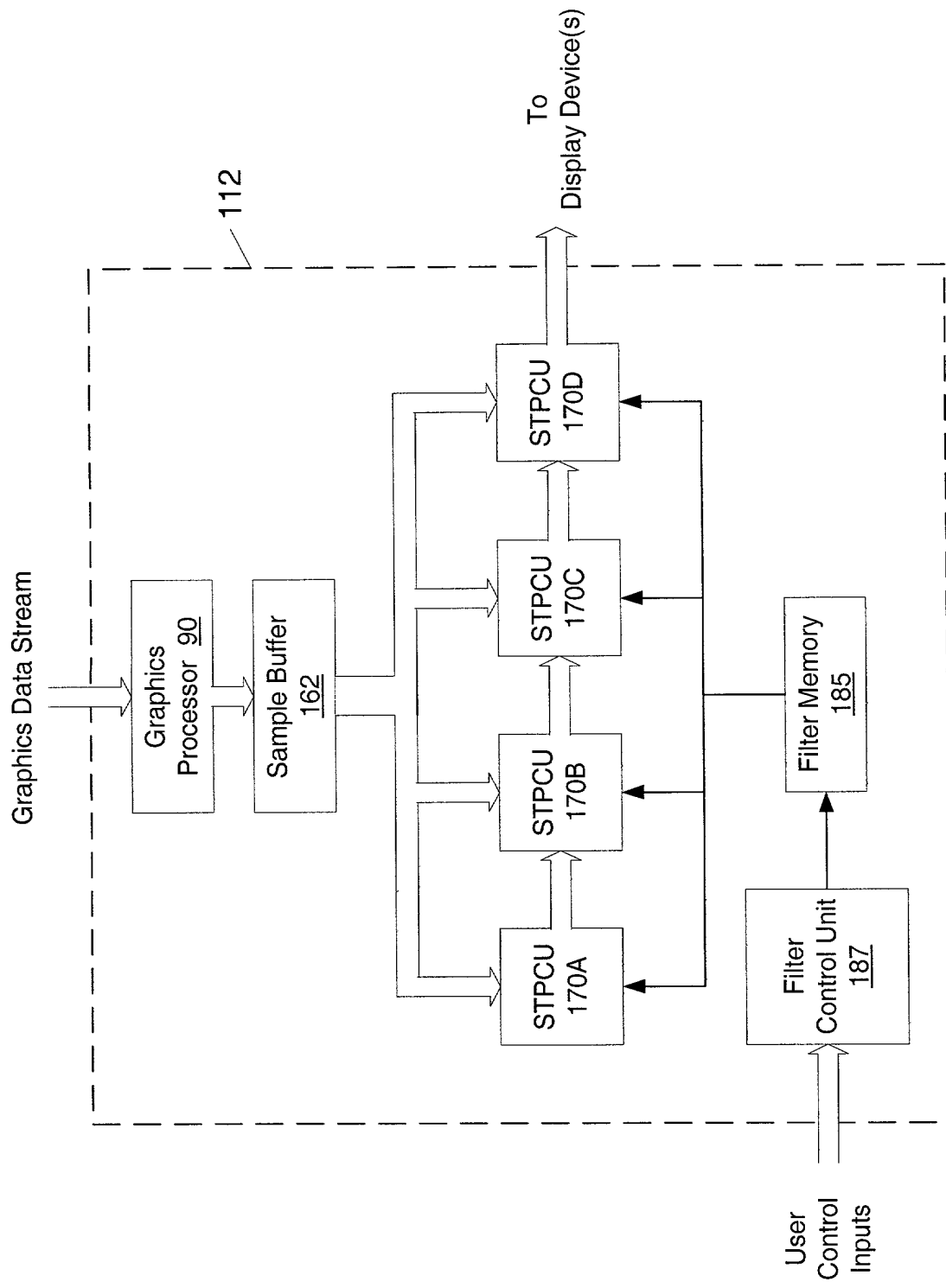


Fig. 28

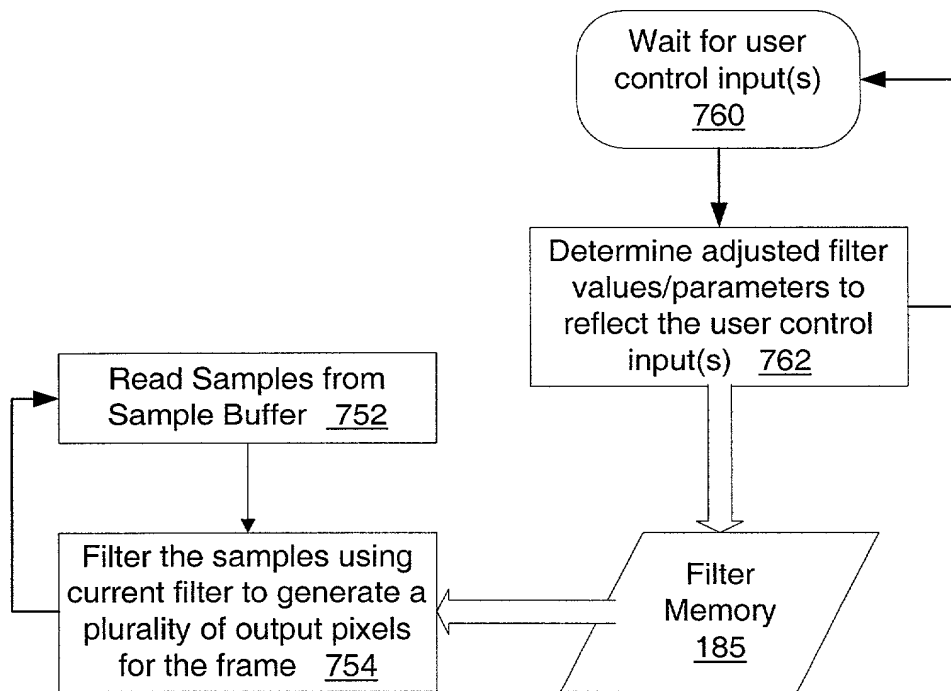


Fig. 29

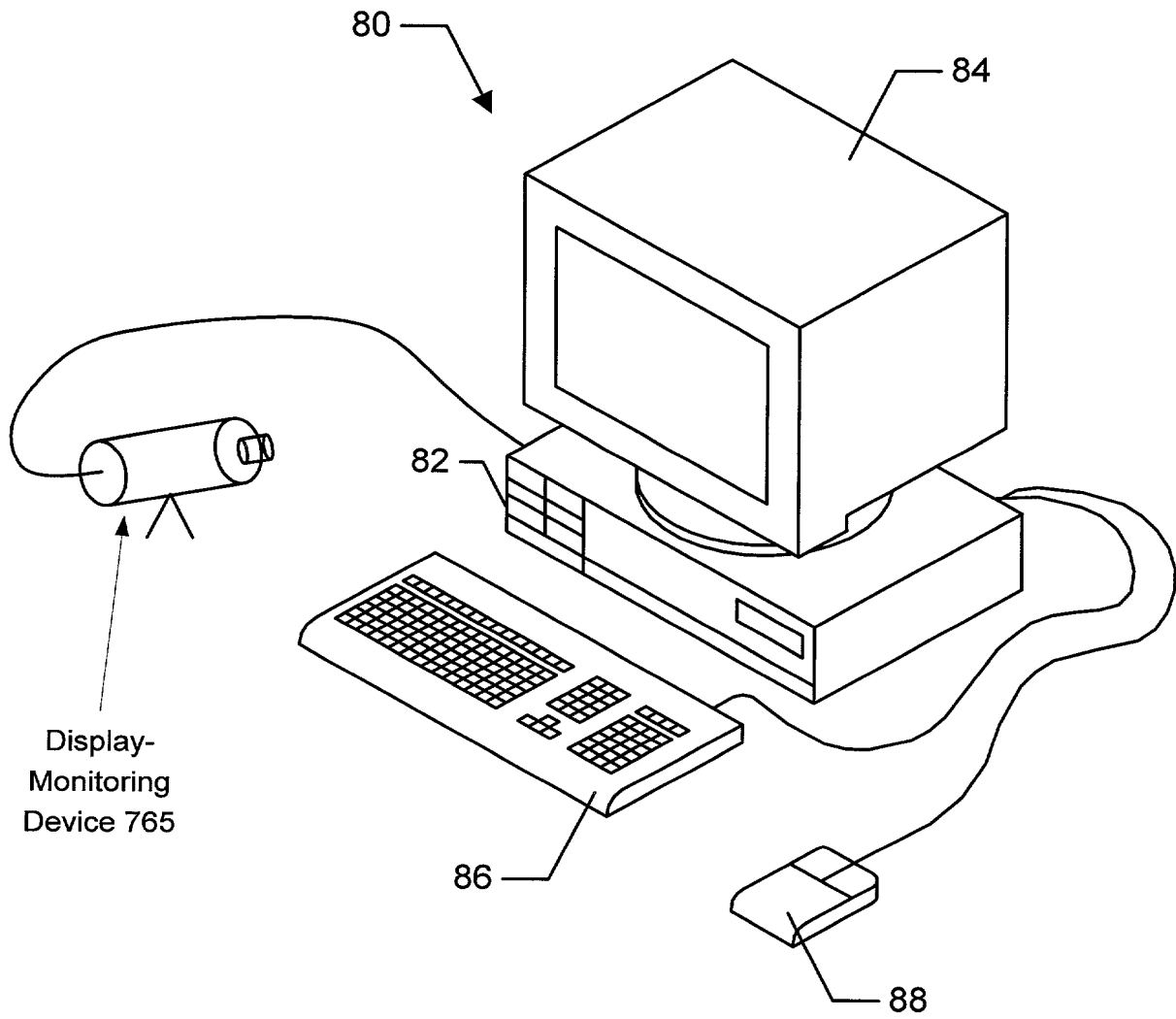


Figure 30

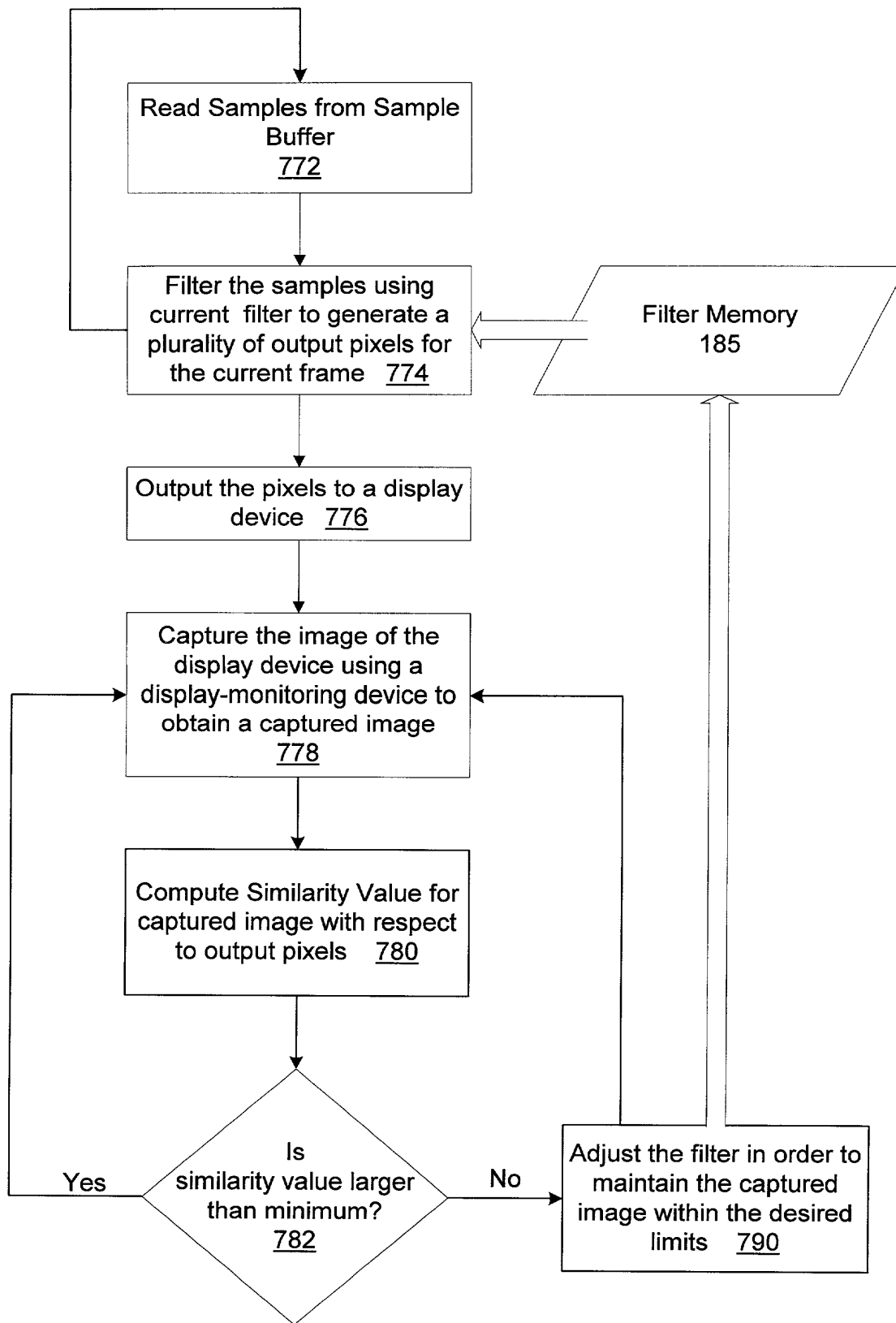


Fig. 31